Abstract of the Disclosure

An apparatus and method are provided for precisely isolating a target lesion in a patient's body tissue, resulting in a high likelihood of "clean" margins about the lesion when it is removed for diagnosis and/or therapy. This approach advantageously will often result in the ability to both diagnose and treat a malignant lesion with only a single percutaneous procedure, with no follow-up percutaneous or surgical procedure required, while minimizing the risk of migration of possibly cancerous cells from the lesion to surrounding tissue or the bloodstream. In particular, the apparatus comprises a biopsy instrument having a distal end adapted for entry into the patient's body, a longitudinal shaft, and a cutting element disposed along the shaft. The cutting element is actuatable between a radially retracted position and a radially extended position. Advantageously, the instrument is rotatable about its axis in the radially extended position to isolate a desired tissue specimen from surrounding tissue by defining a peripheral margin about the tissue specimen. Once the tissue specimen is isolated, it may be segmented by further manipulation of the cutting element, after which the tissue segments are preferably individually removed from the patient's body through a cannula or the like. Alternatively, the specimen may be encapsulated and removed as an intact piece.